Neurologisches Centralblatt.

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1. Exhaustion of the Knee-jerk, and the Diagnostic Significance of this Symptom in Nervous Diseases. V. BECHTEREW.
2. The Trigeminal-facial (supraorbital) Reflex and the Westphal-Pilz Reflex. H. LUKÁCZ.
3. Further Contributions to the Babinski Reflex. H. HORNBERGER.
4. Further Study of Asthenic Paralysis with an Autopsy Report. S. GOLDFLAM.

1. *Exhaustion of Knee-jerk.*—Attention is called in this paper to a peculiarity of action of the knee-jerk in multiple neuritis, *i.e.*, a slowing of the reaction, which gradually disappears as the neuritis disappears.

He also calls attention to the exhaustion of the knee-jerk in such diseases as (initial) tabes, myelitis, etc. The knee-jerk reacts to the first tap of the hammer, but rapidly disappears with each successive tap. If this exhaustion increases, it signifies an increasing lesion of the reflex arc, or the reverse if it decreases.

2. *Trigeminal-facial and Westphal-Pilz Reflex.*—Lukácz gives a careful study of the supra-orbital reflex, described by the reviewer, and confirms his results in the study of the nature of this reflex. He says that he "can confirm the observation of McCarthy that the contraction of the orbicularis is absent after resection of the trigeminal nerve," and the absence also of this reflex in affections of the facial nerve. An associated reflex in the pupil corresponding to the Westphal-Pitz reaction is produced in eliciting the above supra-orbital reflex, and is coincident with it. At first there is, after the tap on the forehead, a momentary, slight narrowing of the pupil followed by dilatation. He is, therefore, of the opinion that the Westphal-Pilz phenomenon and the orbicularis phenomenon are true reflexes, and not associated or transmitted movements.

3. *The Babinski Reflex* was present in two cases of cerebral lesions within five minutes after the "insult." From a study of these cases and other cases reported in the literature, he arrives at the conclusion that "the isolated dorsal flexion of the great toe is a reflex which depends for its presence on an intact fiber tract, a deep motor tract from the thalamus to the spinal cord. If, therefore, the dorsal flexion of the great toe be present, and then disappear, it may be assumed that this tract is interfered with by a lesion of the thalamus or lower. If the Babinski reflex be present on both sides after a cerebral hemorrhage, it points to a rupture into ventricles.

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1. Adiposa Dolorosa accompanied by Vasomotor Troubles and Sclerodermitis. ODDO and CHASSY.
2. Treatment of Basedow's Disease by Intrathyroidal Injections of Iodoform Ether. J. ABADIE and CH. COLLON.
3. The Influence of Alcohol upon the Efficacy of Thyroid Extracts. LAD. HASKOVEC.

1. *Adiposa Dolorosa.*—The case is that of a woman of thirty-four years, unmarried, a woman of position and education, who had met with reverses and was obliged to teach. At this time she began to grow stout, though without painful symptoms. In March, 1901, the

patient felt fatigued and lost appetite. After a trip to Nice and return to a cold climate she had pain in her knee-joints and elbows, and they were also swollen without redness. Walking was difficult. A few days later there was redness on the front of the legs corresponding to the pretibial and submalleolar nodes. The articular pain diminished with rest, but the painful nodes increased in number, always in front of the tibia of both sides. The case was pronounced phlebitis, and the patient entered a hospital. At that time her hair was gray in spite of her youth, her thin hands, feet and face made a strong contrast with the rest of her body, which was very fat, especially about the thighs and upper arms; near the joint of the limb the flesh was very soft, elsewhere firm. The distribution of the fat was perfectly symmetrical. Sudden pains were felt in these masses of tissue, exaggerated by standing, by walking, or by pressure; pain was also worse where there were constrictions in the flesh. The trunk showed great size of the anterior abdominal wall, lumbar region, thorax and back. The nodes near the tibias were now very painful, red and finely varicosed, and were not part of the surrounding adipose; these shortly increased in number. In the region of most dense adipose the skin modifications were notable—smooth, white, thickened and adherent with the cellular tissue. This scleroderma, very pronounced in the lower leg, grew less toward the thigh, but predominated where the fat had accumulated, though hardly appreciable on the trunk. The patient felt weak and could scarcely move. There was normal sensibility, except for a coldness in the feet. Reflexes were normal and there was no muscular atrophy, though muscular force had diminished. The patient was very depressed in spite of a formerly cheerful temperament; she cried frequently and seemed slightly unbalanced mentally. She grew slowly worse in all respects, locomotion being very difficult, both on account of adipose, muscular feebleness and the violent pain in the tissues and nodes. Urine had been very scanty and the following analysis was given: color, greenish yellow; density, 1033; reaction, decidedly acid; urea, per litre, 16.52, with phosphates 4.49 and chlorides 5.85; albumin, glucose and urobilin absent, but biliary pigments present. Blood analysis: hemoglobin, 10 for 100; red corpuscles, 547,500, and white 4511 per cubic m.m.; the leucocyte formula was: lymphocytes, 20.33, mononuclear with contained lymphocytes 40.66, polynuclear 58.66, and eosinophile 1.33 for 100. The patient was subjected to thyroid medication, 50 cg. in two doses, morning and evening, and was kept quietly in bed during the first weeks of August. Medication was continued until the 14th, when there was still much pain and the urine was scarce, 50 cc. in twenty-four hours. The medication was slightly diminished, and on September 6 there was diminution in the patient's size, though the nodes were numerous still. For the violent pain in the limbs salicylate of methyl gave some relief. The patient returned home in late October, returning frequently for treatment. On November 12, the symptoms had all much decreased; pain was almost gone, she was brighter mentally, walked better and could even go up and down stairs with comparative ease. For the diagnosis of this case rheumatism was first suggested on account of difficulties with the joints and the rheumatic nodes. But the distribution of the fat, the phenomena of pain and the fact that the patient was a woman, prematurely old and mentally affected, determined the case as one of adiposa dolorosa. With this question settled, attention is given to the peculiarities of the case, the sclerodermitis and vasomotor troubles.

1. The sclerodermic aspect was most pronounced on the lower parts of leg and arm, with sharp bands above ankles and wrists; it was superimposed upon the adipose and ceased with it. This sclerodermitis gave a very peculiar appearance to the skin, making it pearly and white of a glossy surface, at the same time that the pores, deprived of hairs and much distended, tended to make the surface look like that of an orange save for color. The cause for this was evidently trophic, as was that of the adipose; it emphasized the trophoneurotic nature of the case.

2. The vasomotor troubles were many and interesting. The nodes, characterized by slight redness with fine varicosity were present; second the cyanosis of the feet, emphasized when the patient stood; third, the dermographism, the cause of which was also connected with the adipose.

Finally, the excellent results of two trials of medication with thyroidin are pointed out; this lessened the intensity of pain and caused some of the tissue to be absorbed. Such success with this remedy is rare, but it is an interesting and signal case when such good fortune results.

2. *Basedow's Disease and Iodoform Ether.*—This new mode of treatment was made known by Prof. Pitres, who, among twelve patients, cured six and improved the rest. The solution is: ether 20 gm., iodoform 4 gm. Each injection is 1 cc. of this by the Pravas syringe after the usual antiseptic precautions. In order to inject, it is necessary to define by palpation the thyroidian tumor, and to recognize the superficial veins and nerves of the neck; the latter are moved to one side with the left hand, and the needle, ordinarily held like a pen, is placed lightly on the point of greatest hypertrophy of the goiter. By obtaining a movement of deglutition from the patient, one is assured of the penetration of the needle in the thyroid body and rapidly injects. The injections are sometimes preceded, accompanied or followed by certain phenomena which the author emphasizes. Emotional apprehension, which causes trembling and palpitations, augmentation of ocular tension and conjunctival hyperemia are often prelimary symptoms. At the moment of injection there is a sort of bubbling comparable to the penetration of air into the veins: this is rare and probably due to the sudden evaporation of ether. There are also some changes relative to the distention of the glandulo-vascular parenchyma and to the probable compression of some of the nerves; they consist in a sensation of increase in the size of the throat, smarting, pinching and shooting pains from the cervical region to the jaw, ear, and the nape of the neck; often a dry cough is present. After the injection a more or less marked tension is felt in the thyroid region; often a bad taste in the mouth, resulting from the passage of iodide in the saliva. To control the lesions produced in the interior of the goiter by these injections, connective tissue must be produced. There is first a diffuse sclerosis with capsular and vascular predominance, making ridges and irregular thyroid lobules in the interior of which there is dislocation and atrophy of the vescicles, disappearance of the collodial substance and an extreme proliferation of the epithelial elements. Later the connective tissue becomes fibrous.

The experiments in this treatment extended over twenty-four cases of Basedow's disease, some severe, some light, all treated in this way exclusively. The patients were all women, from fifteen to fifty years old, at all stages of the malady. The injections of 1 cc. were made at intervals of seven to eight days at the point of greatest hypertrophy. In each case improvement followed, sometimes after only one or two injections, but when complete cure was affected, after months or even years, with the treatment less frequent. Of the various symptoms, goiter is the first to diminish, the injections having as their object the sclerosis of the gland; then headaches, insomnia, irritability, amenorrhea, polyuria, difficult deglutition, ocular pain, all disappear; later appetite returns and digestion is good, strength increases and the usual occupations are resumed. Even the cardinal symptoms improve; trembling often disappears completely; the subjective symptoms which accompany tachycardia, particularly precordial pain, vanish; the thoracic attacks and the beats of the carotids are no longer perceptible. Likewise the paresthetic or painful phenomena, which accompany exophthalmia and the motor troubles and inflammatory lesions which complicate it disappear rapidly and permanently. Accidents or complications or inflammatory phenomena have never been known to follow injections of iodoform ether. Once only a state of semi-syncope was brought about, and once a slight unilateral paralysis of the glottis, which disappeared in a few days.

3. *Alcohol and Thyroid Extracts.*—In studying the action of thyroid fluids upon the central nervous system, the author found that an intravenous injection produces, in the dog, an acceleration of pulse and a diminution of blood pressure. The author has already shown that the first phenomenon is caused primarily by the accelerator nerve of the heart, and the second phenomenon by the direct enfeeblement of the heart itself. He found that thyroid liquid preserved by means of alcohol lost its efficacy, while acting as a fresh liquid when preserved in carbonic acid; and on closer study noted that it was the alcohol itself which caused this inefficiency. Thyroid liquid, if mixed at all with alcohol, acts differently from the fresh, and the action depends upon the quantity of alcohol; that containing only a few drops being scarcely changed; mixed in equal proportions, the liquid produces diminution in blood pressure more pronounced than that of the pure liquid, and a slow pulse. The combination of thyroid liquid and alcohol, in the proportion of twenty to ten, produces slight slowing of pulse and less pronounced diminution of blood pressure. With less alcohol there results slighter slowing of pulse and almost no change in blood pressure. With fifty parts of thyroid liquid to twelve of alcohol, action of the extract is not destroyed, though acceleration of pulse and diminution of blood pressure are less than after injections of fresh liquid. Injection of liquid of a mixture in the proportion of twelve to fifty produces very considerable pulse and pronounced diminution of blood pressure. To account for all these phenomena, study was begun on the innervation of the heart. When the diminution of blood pressure is concerned, it depends directly on the enfeeblement of the heart itself. The slowing of the pulse is caused by the excitation of nerve centers as much as by that of the periphery, and in part also by the direct action of the alcohol on the heart. The weak doses of alcohol directly influence heart action in such a way that, reinforcing it, they slightly augment blood pressure. One might consider thyroid liquid and weak doses of alcohol as antagonistic, but in consideration of the results of the experiments in different proportions, and the various results on separate animals, the variation is from the quantitative point of view only. To show that alcohol does not affect the essential nature of the thyroid extract, the following experience is adduced by the author. Two mixtures were prepared, one with

twelve parts of the liquid to fifty of alcohol, the other with fifty parts of liquid to twelve of alcohol. The alcohol was allowed to evaporare from both, and the residue was injected with a little distilled water into the animal. The result from both was as that of fresh thyroid liquid. Thus alcohol does not essentially alter the thyroid fluid and leaves it with its powers of action upon heart and blood pressure; but when preserved or mixed with alcohol, it acts in a manner different from that of the fresh liquid, as the action of alcohol in the mixture paralyzes the action of the thyroid principle.

JELLIFFE.

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1. Some Internal Symptoms of Somatic Degeneration in Paralytics and Normal Individuals; also a Contribution to the Anatomical and Anthropological Variations of the Visceral Organs in Man. NÄCKE.
2. A Statistical Study of the Etiology of Progressive Paralysis. HOPPE.
3. Height and Body-weight in Idiotic Children. SKLAREK.
4. A Contribution to the Differential Diagnosis of Hysteria and Katatonia. KAISER.
5. Circular Insanity with Choreic Movements Occurring in a Child. VAN BREVO.
6. On Conrad Ferdinand Meyer. HESS.

1. *Some Internal Symptoms of Somatic Degeneration.*—Näcke made autopsies on 104 general paralytics and 108 normal individuals to determine the presence of visceral stigmata of degeneration, such as double apices of the heart; anomalies in the lobular formation of the lungs; lobulation and incisures of the liver; horse-shoe kidneys, etc. Each paralytic showed on an average four visceral stigmata, while an average of two or three was found in normal individuals. He therefore concludes that general paralysis occurs mostly in those individuals of imperfect organisms, an opinion which indicates a greater hereditary basis in the etiology of general paresis than is generally held, and also possibly indicates a more fruitful source of determining the degree of individual degeneracy than that usually followed in examining external bodily signs solely.

2. *Etiology of Progressive Paralysis.*—Hoppe found in a statistical study of the etiology of 501 general paralytics that syphilis was the "only cause" in 5.2 per cent., syphilis plus other causes in 20.2 per cent., alcoholism alone in 3.8 per cent., combined with other causes in 19.8 per cent.; heredity in 9.2 per cent., combined with other causes in 32.3 per cent.; sexual excesses in 0.4 per cent., combined with other causes in 7.8 per cent.; emotional causes in 5.4 per cent., combined with other causes in 18.8 per cent.; over-exertion in 2.6 per cent., combined with other causes 9.1 per cent. However, in such studies the possible faulty etiological history must be borne in mind.

3. *Height and Body Weight in Idiotic Children.*—In the study of idiots in the Insane Asylum at Dalldorf, Sklarek found the physique of the teachable idiots proportionately poorly developed as compared to that of normal children, and those teachable idiots who showed the greatest capacity approached nearest to the normal in physical growth.